



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,913	01/28/2002	Kazuya Yamanoi	111812	1482
25944	7590	10/02/2003	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			BRAUN, FRED L	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/055,913

Applicant(s)

YAMANOI ET AL.

Examiner

Fred L. Braun

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 6-19 is/are allowed.
- 6) ☒ Claim(s) 5,20-23 and 28-33 is/are rejected.
- 7) ☒ Claim(s) 24-27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

Art Unit: 2852

1. The abstract of the disclosure is objected to because it uses the legal phraseology "comprises". Correction is required. See MPEP § 608.01(b).
2. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following: (1) if a machine or apparatus, its organization and operation; (2) if an article, its method of making; (3) if a chemical compound, its identity and use; (4) if a mixture, its ingredients; (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

Art Unit: 2852

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The specification is objected to under 37 CFR 1.74 because it fails to provide a brief description of drawing Figures 25(a) and 25(b), respectively, while there appears to be no Figures 30(a) and 30(b), respectively, in the drawings which corresponds to the brief description of same. Correction is required.

6. The term or expression "filed", appearing on line 5 of claim 7 and line 2 of claim 8, respectively, has been changed to --field--as obviously intended.

Art Unit: 2852

7. Claims 5 and 28-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There appears to be no clear antecedent basis for “the conductive elastic body”, recited on line 2 of claim 5 thereby rendering said claim indefinite. As to claims 28-33, lines 1 and 2 of base claim 28 are double recitations of each other thereby rendering said base claim and any claims dependent thereon indefinite.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2852

10. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese publication by Kamioka et al in view of Swift.

All of the claimed structure broadly recited in the claims is obvious to one having ordinary skill in the art upon perusal of the Japanese publication by Kamioka et al except for the specific use of a developing device which uses a magnetic field production member. More specifically, the Japanese publication by Kamioka et al shows that it is well known in the art to provide a partition member 20 (Fig. 1) between the charging member 2 (Fig. 1) and the removal member 10 (Fig. 1) disposed upstream of the charging member for removing residual toner left on the photoreceptor 1 (Fig. 1) after image transfer at point 6 (Fig. 1) so that the residual toner removed by said removal member which is scattered by the removal member collides with the partition member 20 and does not reach the charging member which would result in contamination of the charging member as recited in base claim 20, for example. The latent image write unit or LED array 3 (Fig. 1) of the Japanese publication by Kamioka et al forms the latent image on the photoreceptor of same subsequent to uniform charging of said photoreceptor. With respect to claim 23, for example, paragraph "0015" of the attached English translation of the Japanese publication by Kamioka et al, discloses that the partition 20 of same does not contact the removal member 10. As to claim 21, for example, it is submitted that it is obvious to one having ordinary skill in the art that the partition member should have a small gap or minute space between its edge closest to the surface of the photoreceptor in order to prevent scratching of said surface which would shorten the useful life of the photoreceptor.

Art Unit: 2852

The patent to Swift shows that it is well known in the art to provide the image formation apparatus with a rotating charging member 26 (Fig. 1) for uniformly charging the photoreceptor 10 (Fig. 1) and a rotating removal member 60 (Fig. 1) upstream of the charging member for removing residual toner from the photoreceptor subsequent to image transfer as well as a magnetic field production member 36 (Fig. 1) for ensuring that toner is carried by the carrier particles to the surface of the latent image on said photoreceptor to develop said latent image. With respect to claim 22, for example, it is submitted that it is obvious to one having ordinary skill in the art that if the device of Swift was modified to include a partition member between the charging member and removal member of same in order to prevent contamination or soiling of the charging member, as suggested by the Japanese publication by Kamioka et al, that the partition member would have to extend below the line connecting rotation centers of the charging member and the removal member of Swift or the scattering residual toner would not properly collide with the partition member and be prevented from contaminating the charging member but would pass by the large gap which would exist between the lower edge of the partition and the surface of the photoreceptor to contaminate the charging member.

Therefore, to provide the device of the Japanese publication by Kamioka et al with a magnetic field production member for the developing device in order to ensure that toner is carried by the carrier particles to the surface of the photoreceptor to develop the latent image, as suggested by Swift, and to use a rotating contact charging device for the charging member 2 of Kamioka et al in order to prevent the production of outgas or ozone, as suggested by column,

Art Unit: 2852

lines 19-34 of Swift, would be an obvious modification of the prior art to one having ordinary skill in the art at the time applicants' invention was made. Alternatively, to provide the device of Swift with a partition member between the charging member and the residual toner removing member of same in order to prevent contamination or soiling of the charging member with residual toner, as suggested by the Japanese publication by Kamioka et al, would also be an obvious modification of the prior art to one having ordinary skill in the art at the time applicants' invention was made.

11. The Japanese publications by Koshimura et al, and Suzuki, respectively, are cited of interest to further show the obviousness of disposing a partition member upstream of the charging member for a photoreceptor; the patents to Ohno et al, Yoshioka et al and Abe et al, respectively, to further show the obviousness of using a rotating contact charging member for the photoreceptor in order to prevent the production of ozone; and the patent to Ishii et al and the Japanese publication by Morikawa et al are cited of interest to show the use of a magnetic field producing means to effect charging of the photoreceptor by the charging member.

12. Claims 5 and 28-33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

13. Claims 24-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



Art Unit: 2852

14. The following is an examiner's statement of reasons for allowance: Claims 1-19 are considered to patentably define over the prior art of record because the prior art fails to disclose the use of the magnetic field production member of the developing device to effect the charging member, as recited in base claim 1, for example. Claims 28-33 are considered to patentably define over the prior art of record because the prior art fails to disclose the use of a surface layer film for the charging member having the Young's Modules range recited in base claim 28, for example.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

15. Any inquiry concerning this communication should be directed to Fred L Braun at telephone number (703) 308-0128.

*Fred L Braun*  
FRED L BRAUN  
PRIMARY EXAMINER  
ART UNIT ~~2852~~

F BRAUN/pj

09/12/03